

March 22, 2007

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SUBJECT: Winston-Salem Northern Beltway (FHW-E40325-NC): Supplemental Final
EIS Western Section TIP No. R-2247 (CEQ No. 20070058), and Final EIS
Eastern Section TIP Nos. U-2579 and U-2579A (CEQ No. 20070057)

Dear Dr. Thorpe:

In accordance with Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA is providing comments on the subject document which serves as a Supplemental Final Environmental Impact Statement for the Western Section (R-2247), and a Final Environmental Impact Statement for the Eastern Section (U-2579 and U-2579A) of the Northern Beltway, collectively referred to herein as the FEIS. EPA appreciates the cumulative assessment of the entire Northern Beltway by the North Carolina Department of Transportation (NCDOT) and the Federal Highway Administration (FHWA). The total length of the project would be approximately 34 miles on new alignment. EPA commented on the previous Supplemental EIS issued for review in October 2004, and is responding to those stated concerns. Additionally, EPA is commenting further about impacts to migratory birds and impacts of invasive exotic plant species. We are also commenting on the classification of 'Prime Farmland' and the discussion of impacts which should be clarified.

The benefits of having the FEIS cover the entire Northern Beltway are overshadowed by confusing data quantification and presentation which have not been corrected from the 2004 DEIS; and incomplete documentation of the proposed mitigation for identified unavoidable impacts. The FEIS lacks specific information regarding mitigation for impacts to 7-8 linear miles of surface streams. It is important for a FEIS to disclose fully the proposed mitigation so that interested citizens and local officials can be provided with a comprehensive plan for addressing this large amount of compensatory action.

Erosion and sedimentation will also be a major, ongoing adverse impact. The project would benefit from close oversight by state and local environmental officials regarding the avoidance and minimization of impacts to surface streams. NCDOT should strive to avoid concurrent project clearing and grading with that for private development

in order to lessen excessive storm water runoff to small streams. EPA is hopeful that Forsyth County's widened streamside buffer ordinance recently enacted for Abbotts Creek, a 303(d) listed stream, will be followed and that this ordinance would be applied to other watersheds to lessen the direct and indirect impacts of this project.

Clearing operations, which will remove 936 acres of terrestrial forest, will have significant adverse impacts to wildlife. NCDOT should follow the federal requirements for minimizing adverse impacts to migratory birds by minimizing/avoiding clearing activities during nesting season. Conversely, the large amount of clearing and earth moving unfortunately will benefit opportunistic invasive exotic plants. EPA recommends that NCDOT follow Federal Executive Order 13112 and take proactive measures for the detection, and prevention of spreading invasive species. Of particular note, is the documentation of the highly invasive Japanese knotweed within the project area.

EPA is recommending that all of the environmental commitments listed in the "Green Sheets," and each of the concerns noted in our comments be addressed in the Record of Decision. There should be substantive commitments for follow-through to achieve maximum avoidance, minimization, and where necessary resource compensation. Please see the enclosed detailed comments. Overall, although some of our DEIS comments have been addressed, we continue to have concerns about the points described above.

Thank you for the opportunity to comment on the FEIS. Please direct inquiries to Mr. Ted Bisterfeld (tel. 404/562-9621) who is the Region's primary contact for this project review.

Sincerely,

Heinz J. Mueller
Chief, NEPA Program Office

Enclosures: Detailed EPA Comments

cc: Federal Highway Administration, NC Division
US Fish and Wildlife Service, Raleigh Field Office
US Army Corps of Engineers, Wilmington District

ENCLOSURE

Detailed EPA comments on the Winston-Salem Northern Beltway FEIS

Air Quality: The area is in a designated Early Action Compact per the Conformity Rule. This EAC will expire in December 2007. EPA recommends that the ROD include a final verification of the project's inclusion in a conforming Long Range Transportation Plan (LRTP) and identify mitigation for project construction and operation..

Air Quality: The NCDOT response to EPA's comment recommending further consideration of HOV lanes indicates that the LRTP does not recommend HOV lanes for this project. That plan states that HOV lanes may be applicable if air quality problems worsen. The area continues to have poor air quality so it is unclear why HOV would not be implemented in order to reduce vehicle usage but maintain future mobility. Also, it is noted that planning is continuing for improvements to US 52 (U-2826B) through the city including addition of two lanes. The air quality benefits and the adverse impacts to the community should be fully considered in decisions for that project. Widening US 52 to 8 lanes was rejected by NCDOT as alternative to the Northern Beltway.

Air Quality: Page 1-35. Traffic modeling was done with US 52 at 8-lanes as it is defined in the LRTP. This is inconsistent with the response to EPA's comment where NCDOT indicated that such widening through the center of the city would result in substantial environmental justice impacts. Assuming the Northern Beltway is built, EPA recommends careful review of subsequent traffic analyses and modeling to ensure that US 52 requires widening.

Aquatic Habitat: EPA notes the NCDOT efforts to re-survey (via aerial photography and mapping) to document conditions, relative to residential development, stream encroachment, etc., within the area have not changed since earlier EIS documentation. NCDOT indicates that it was unimportant for decision-making to document the condition of natural resources. EPA differs with this view because it is necessary to define the status of resources, particularly aquatic habitat, in order to determine the necessary/appropriate mitigation for the project.

Water Quality: EPA notes the response to comment A24-12. Although the NCDOT and FHWA lack unilateral authority to address degraded water quality, EPA notes that transportation planning involves local agencies not just NCDOT. It is therefore incumbent on all parties to cooperate to address degraded surface waters, since the NCDOT project contributes to the indirect adverse effects to streams.

Compensatory Mitigation: EPA notes the response to comments at page 4-218 and Page 6-68. NCDOT and FHWA identify the Friedberg Site as the location where the wetland

impacts from the R-2247 project are to be mitigated. The FEIS does not describe what compensatory mitigation is available for the wetland impacts from the U-2579/U-2579A project segments. Page 4-218 also describes approximately 9,000 total linear feet of stream mitigation provided at the WRP Stone Mountain Park Site in Wilkes County. The total stream impacts after avoidance and minimization efforts by the Merger team for the project are 36,445 linear feet. NCDOT and FHWA have not proposed any specific on-site stream restoration or mitigation efforts. There are still 27,445 linear feet of stream impact that will require compensatory mitigation. FHWA and NCDOT should have provided additional detail on the status of obtaining compensatory mitigation for stream and wetland impacts. The statement in the FEIS regarding a “full analysis of the impacts and the existing mitigation will be included in the 404/401 permitting process” is not potentially consistent with the Section 404/NEPA Merger 01 Memorandum of Understanding (MOU). Additional details regarding potential on-site mitigation opportunities as well as off-site compensatory mitigation through the Ecosystem Enhancement Program (EEP) should be available at this stage of the Section 404/NEPA process. The fact that the EEP is not referenced or mentioned in Sections 4.17.2, 4.17.3 and 4.17.4 of the FEIS and the need for potentially 27,445 linear feet of stream mitigation is a significant omission. EPA is not confident that compensation is near to being resolved. FHWA and NCDOT should provide this information during concurrence point 4B meetings and prior to the issuance of the ROD.

Federal Species of Concern/State Listed Species, Pages 3-104 & 105: EPA acknowledges the North Carolina legal protection afforded to Federal and State endangered, threatened and species of concern. It may be important to note that while the Loggerhead Shrike (*Lanius ludovicianus ludovicianus*) is a State-listed species of Special Concern, it is also afforded potential protection under the Migratory Bird Treaty Act of 1918, as amended by the Migratory Bird Treaty Reform Act of 2004.

Invasive Exotic Plant Species, Pages 3-83 to 3-92 and Pages 4-198 to 4-204: The FEIS lists a number of invasive exotic plant species present within the project study corridor under the descriptions of certain terrestrial biotic communities, including Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*) and others. However, the FEIS fails to include other significant, highly invasive exotic plant species, including Japanese knotweed (*Reynoutria japonica* {Weakley, 2006}; *Fallopia japonica* or *Polygonum cuspidatum*), Tree of Heaven (*Ailanthus altissima*), Mimosa or Silktree (*Albizia julibrissin*) and Kudzu (*Pueraria montana*). While all of these highly invasive species are present in the project study corridor and can impact terrestrial communities, EPA has environmental concerns particularly for Japanese knotweed as it can thrive in both terrestrial and riparian habitats. Colonies of Japanese knotweed can

already be found along the I-40 and I-40 Business highway corridors, including one colony in the preferred alternative project area west of Kernersville and east of Salem Lake (a water supply). The proposed project is 34.2 miles in length, has approximately 936 acres of terrestrial forest impacts (1.46 square miles) and 53,352 linear feet of stream impact (non-mitigatable and mitigatable). The potential to substantially spread Japanese knotweed into riparian areas is a significant direct impact that was not addressed in the FEIS and could have long-term and indirect impacts to water quality within the project study area. Although invasive exotic plant species are referenced in the FEIS, FHWA and NCDOT did not address the requirements of E.O. 13112. The E.O. requires the Lead Federal Agency to prevent the introduction of invasive species, detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner, monitor invasive species populations accurately and reliably and provide restoration of native species and habitat conditions in ecosystems that have been invaded. Japanese knotweed in many areas of the U.S., including North Carolina, is spreading exponentially through human activities such as mowing near riparian areas, placement of fill dirt or quarry stone with rhizomes, etc. EPA and other resource agencies believe that there is credible scientific evidence that Japanese knotweed can adversely impact native wildlife habitat (Blossey, Nuzzo and Maerz, 2006). There is also empirical evidence that colonies of Japanese knotweed can increase winter time bank erosion rates and cause long-term degradation to water quality. The potential costs to completely eradicate Japanese knotweed once it has become established can be very substantial (\$1,200 to \$10,000 per acre). Considering the location of at least one existing colony of Japanese knotweed near designated water supply and critical water supply areas, the problem of managing and controlling knotweed in these areas is extremely difficult. EPA believes that FHWA and NCDOT should fully examine the issue and compliance with the E.O. in the Record of Decision (ROD) and develop an avoidance, minimization and mitigation strategy with input from the resource agencies for invasive exotic plant species with an emphasis on preventing the uncontrolled spread of Japanese knotweed.

Prime Farmland, Pages 3-71 to 3-72 and Pages 4-146 to 4-152: On page 4-149 of the SFEIS/FEIS, it is stated that a small amount of land crossed by the Preferred Western Alternative (R-2247) is currently zoned agriculture. It is also stated that the Preferred Alternative skirts the Rural Area designation north of Yadkinville Road based upon the Growth Management Plan (Figure 3-2). The SFEIS/FEIS did not provide the actual impact to either the agriculturally zoned area or the Rural Area designation based upon the footprint of the Preferred Alternative. This information should be quantified in the ROD. EPA also notes on page 4-149 that the statement “no mitigation for farmland loss is required for the project” (in accordance with the Farmland Protection Policy Act - FPPA). The FPPA and regulations contained at Title 7 of the Code of Federal Regulations, Part 658, require that “Federal agencies consider alternative actions, as appropriate, that could lessen adverse effects”. In NEPA nomenclature, this is essentially

avoidance and minimization and not 'formal' mitigation in the context of 'creating' or 'restoring' prime farmland. The issue of "mitigation" for farmland loss is repeated on page 4-151 for U-2579 and on page 4-152 for U-2579A. There appears to be substantial confusion by certain parties on the requirements of the FPPA. EPA highlights this issue because the information in the SFEIS/FEIS is quite confusing. EPA notes that Tables 4-47, 4-48, and 4-49 in the SFEIS/FEIS impacts are for Prime and State/Locally Important Farmland soils, and that none of the preferred alternatives impact Prime or State/Locally Important Farmlands under the NRCS Land Assessment and Site Assessment (LESA) criteria (Reference: 7 CFR Section 658.4(c)(2). Sites receiving a total score of less than 160 need not be given further consideration for protection and no additional sites need to be evaluated). EPA notes that page 3-72 identifies that there are 62,005 acres of prime farmland soils and 72,285 acres of state and locally important farmland soils in all of Forsyth County. Based upon Figure 3-6, it appears that approximately 17 farms are identified as participating in the Farmland Preservation Program in Forsyth County and that they represent only a few thousand acres. None of these designated farms are impacted from the proposed project. This issue could have been more clearly highlighted in Section 4.12.8 along with the statement that none of the preferred alternatives for R-2247, U-2579 or U-2579A impact parcels participating in the Farmland Preservation Program and that a majority of actual agricultural areas where the soils are identified as being prime or state/locally important farmland otherwise meet the specific NRCS criteria for protection under FPPA. The Table 4-47 impact figures do not match up to the text description of impacts on pages 4-148 and 4-149. What is even more confusing to EPA is the information contained in Table 4-88 for Combined Direct Environmental Consequences on pages 4-258 and 4-259 that lists 1,380 acres of Prime, Statewide and Local Important Farmland (not soils) for the preferred alternatives for R-2247, U-2579 and U-2579A. If one adds the 'text' information on pages 4-148 and 4-151 the Table 4-49 information, the 'prime farmland impact' is 1,379.6 acres, but the actual impact is to prime farmland soils, and not the regulatory definition of a prime farmland. This is further complicated by the format of Table 4-88 that lists 369 acres of agriculture and 1,160 acres of maintained/disturbed land just above the environmental issue of Acres of Prime, Statewide and Local Important Farmland. The entire sections on 'prime farmland' need to be clarified and simplified in the ROD. The actual impact to prime, unique and statewide and locally important farmland appears to be 0 acres based upon coordination and consultation with NRCS.